



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 Chestnut Building
Philadelphia, Pennsylvania 19107-4431

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NAS WILLOW GROVE
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REPLY TO ATTENTION OF:

Federal Facilities Branch (3HW50)

VIA TELFACSIMILE
VIA ELECTRONIC MAIL

October 31, 1996

Department of the Air Force
913th Airlift Wing
Willow Grove Air Reserve Station
2164 McGuire Street, Building 232
Willow Grove, PA 19090-5232

Attn: Hal Dusen
Remedial Project Manager

Department of the Navy
Willow Grove Naval Air Station
Environmental Department
Route 611, Building 78
Willow Grove, PA 19090-5005

Attn: James R. Edmond (Code 29)
Environmental Coordinator

Re: Draft Off-Site Well Sampling Plan ("Sampling Plan")
Willow Grove Air Reserve Station ("ARS") &
Naval Air Station Joint Reserve Base ("NAS/JRB")
National Priorities List ("NPL") Installation
Willow Grove, PA

Dear Messrs. Dusen and Edmond:

The U.S. Environmental Protection Agency Region III ("EPA Region III" or "Agency") has received the draft Sampling Plan, which was transmitted to the Agency by NAS/JRB via electronic mail on October 24, 1996. By way of an October 25, 1996 electronic mail message, NAS/JRB requested EPA Region III comments no later than October 31, 1996. The objective of this correspondence is to provide EPA Region III comments regarding the approach to performing sampling efforts contemplated in the draft Sampling Plan, as well as specific recommendations for collecting, analyzing and validating ground water samples from residences/business located in the vicinity of ARS and NAS/JRB (collectively termed as the "NPL Installation"). The following is provided for your information and should be considered prior to implementing activities outlined in the draft Sampling Plan:

Performance of a Ground Water Usage/Water Well Survey

1. The draft Sampling Plan lists names/addresses of 14 residences or businesses whose owners will be contacted by NAS/JRB regarding potential sample collection, while only six wells will ultimately be selected as part of the present sampling effort. In light of this fact, the following represent issues that NAS/JRB should be prepared to address:

- a. Owners of residences/businesses whose wells are listed in the draft Sampling Plan and who may be contacted to discuss potential sample collection, could question why their wells were not included in this sampling effort.
- b. Owners of other private wells that are not listed in the draft Sampling Plan, but are located in the vicinity of the NPL Installation, may question why their wells were not sampled.

2. EPA Region III understands that NAS/JRB intends to collect ground water samples at six residences/businesses during the first full week in November 1996 and that results could be made available by Thanksgiving. In light of these objectives and associated timeframes, NAS/JRB must consider the following factors:

- a. Time required to determine actual wells where samples will be collected and to obtain consent from property owners to conduct the sampling.
 - b. Time required to obtain results (i.e., "raw" or non-validated data), along with associated data deliverables, from the analytical laboratory.
 - c. Time required to perform full third-party validation of analytical data in accordance with EPA Region III Modifications to the National Functional Guidelines for Inorganic and Organic Data Review ("EPA Region III Modifications").
 - d. Time required to review validated data (i.e., comparison to regulatory criteria/standards and risk-based screening concentrations), in consultation with EPA Region III and the Pennsylvania Department of Environmental Resources ("PADEP").
 - e. Time required to prepare a letter to each well owner that includes information such as the sampling date/time and suite of analytical parameters, along with a discussion of the analytical results.
3. Statements in the draft Sampling Plan imply that selection of residences/businesses to be sampled under this effort will be determined subsequent to the approval of EPA Region III and the Agency for Toxic Substances and Disease Registry ("ATSDR"). In consideration of NAS/JRB's desire to initiate sample collection efforts as soon as possible and to potentially allay concerns expressed by certain residents

and/or business owners, EPA Region III does not object to performance of tasks outlined in the draft Sampling Plan, provided that Agency comments in this correspondence are satisfactorily addressed. By making this statement, EPA Region III wishes to note the following:

- a. NAS/JRB has prepared a large plan view map depicting approximately 20 locations (perhaps more), which are situated beyond the extreme southwest boundary of the NPL Installation in close proximity to certain NAS/JRB Installation Restoration Program ("IRP") sites, where ground water is utilized by residences/businesses. This information was shared with the Agency, PADEP and Restoration Advisory Board ("RAB") members during an October 2, 1996 RAB meeting.
 - b. With the exception of the aforementioned, EPA Region III has not received any information regarding locations (i.e., approximate distances from potential contaminant sources) of wells located in the vicinity of the NPL Installation or depth/construction of these wells.
 - c. It is conceivable that the 14 wells considered and/or six wells ultimately selected for sampling by NAS/JRB may not address ground water users at greatest risk from releases of contamination at the NPL Installation. Such statements regarding risks could only be made with more certainty after evaluating information obtained from a comprehensive Ground Water Usage/Water Well Survey.
4. EPA Region III believes that the sampling effort proposed by NAS/JRB is commendable and the Agency greatly appreciates activities conducted to date with respect to characterizing ground water usage in the vicinity of the NPL Installation. However, in the Agency's opinion, there likely exist additional receptors (i.e., ground water users) who may potentially be impacted by releases of contamination originating from NAS/JRB (or ARS). As a result, collection and analysis of ground water samples from other residences/businesses in close proximity to the NPL Installation may be warranted as additional information is obtained during performance of the Ground Water Usage/Water Well Survey. This statement is based on the following:
- a. EPA Region III understands that locations presented during the October 2nd RAB meeting were based on a review of sewer bills and correspond to residences/businesses who are connected to the public sewer system, but who may continue to use ground water as a supply source. Consequently, there may exist additional residences/businesses utilizing both a septic system and ground water who could only be identified by conducting a house-to-house survey.
 - b. NAS/JRB has initially focused on ground water users identified during the RAB meeting of August 29, 1996 and discussed during the October 2nd RAB meeting. This approach is acceptable as an initial effort because it expeditiously responds to

concerns raised by the RAB, as alluded to in the draft Sampling Plan, and addresses IRP sites within NAS/JRB known to be associated with the highest levels of ground water contamination. However, NAS/JRB should expand its characterization of ground water usage to address remaining IRP sites.

- c. ARS must also identify ground water users who may potentially be impacted by releases of contamination originating from its IRP sites.

5. An August 29, 1996 letter from EPA Region III included recommendations for performing a Ground Water Usage/Water Well Survey at this NPL Installation. Recommendations made in this letter remain unchanged. This survey would include tasks described in the August 29th letter, as modified by subsequent discussions among EPA Region III, ATSDR, the RAB and members of the local community.

6. EPA Region III suggests that the revised Sampling Plan clearly state that input from PADEP was solicited with respect to activities contemplated in the draft Sampling Plan.

7. NAS/JRB agreed to accord EPA Region III as much advance notice as practicable so that the Agency could be present to observe collection of ground water samples. To this end, please notify the Agency prior to initiation of sampling events.

The aforementioned comments should be considered prior implementing future off-post ground water well sampling efforts.

Collection/Analysis/Validation of Samples

1. For the purposes of this sampling effort, use of EPA method 502.2 is acceptable to the Agency, provided that a second gas chromatograph column is utilized to confirm sampling analytical results.

2. NAS/JRB should clearly specify the suite of analytical parameters proposed during this sampling effort. EPA Region III assumes that these parameters will include all target compound list volatile organic compounds ("VOCs").

3. With respect to data deliverable requirements, all deliverables identified in the Appendix to EPA Region III's Superfund Data Validation Policy, dated August 16, 1995, should be generated.

4. Full third-party validation of analytical data should be performed in accordance with EPA Region III Modifications.

5. Field quality control blanks should be collected in the following manner: [a] field blanks at a frequency of one per 20 samples or one per day, whichever is more frequent; [b] one trip

blank for each cooler; [c] temperature blanks for each cooler and [d] duplicates at a frequency of one per ten samples or one per day, whichever is more frequent.

6. With respect to VOCs, holding time requirements are 14 days for preserved samples (i.e., reducing pH to less than 2.0 with hydrochloric acid) or seven days if sample preservation techniques are not employed.

7. The proposed fifteen-minute time period for "purging" a water supply system prior to sample collection is acceptable to EPA Region III.

8. If possible, samples from residences/businesses should be collected at a location prior to the water storage tank (or similar structure), as opposed to spigots or faucets.

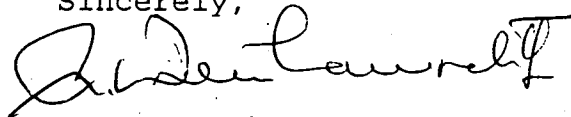
9. In cases where a residence (or business) is connected to a public water distribution system and continues to utilize a privately-owned well, EPA Region III recommends collecting samples from the privately-owned well.

The draft Sampling Plan should be revised to reflect the aforementioned comments regarding collection, analysis and validation of ground water samples.

In closing, EPA Region III has discussed the draft Sampling Plan with ATSDR and PADEP. EPA Region III understands that ATSDR will be providing formal comments to NAS/JRB regarding the draft Sampling Plan in the near future. On a related matter, EPA Region III strongly recommends that NAS/JRB and ARS contact Tom Ames, Base Realignment and Closure Environmental Coordinator at the Naval Air Warfare Center ("NAWC") Warminster, to discuss "lessons learned" during similar efforts conducted at NAWC. Mr. Ames can be reached at (215) 441-1112.

If either of you or representatives from your respective organizations have any questions or wish to further discuss these comments, please contact me at (215) 566-3359 or at my e-mail address "lausch.robert@epamail.epa.gov". The Agency looks forward to hearing from you soon.

Sincerely,



Drew Lausch
Remedial Project Manager

cc: Paul Leonard (EPA)
Kathy Davies (EPA)
Bill Hudson (EPA)
Tom Stukas (ATSDR)

✓ Jim Colter (NORTHDIV)
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